

ABSTRACT

5 An object of the present invention is to provide a
gallium nitride compound semiconductor multilayer
structure useful for producing a gallium nitride compound
semiconductor light-emitting device which operates at low
voltage while maintaining satisfactory light emission
output.

10 The inventive gallium nitride compound semiconductor
multilayer structure comprises a substrate, and an n-type
layer, a light-emitting layer, and a p-type layer formed
on the substrate, the light-emitting layer having a
multiple quantum well structure in which a well layer and
a barrier layer are alternately stacked repeatedly, said
15 light-emitting layer being sandwiched by the n-type layer
and the p-type layer, wherein the well layer comprises a
thick portion and a thin portion, and the barrier layer
contains a dopant.